

REMARKS/ARGUMENTS

Review and reconsideration on the merits are requested.

The applicants acknowledge that claims 18-24 are withdrawn from consideration.

In response to the objection to claim 15, the applicants note that the term "CalSiBar" is a term that is used widely in the field of this invention to refer to calcium-silicon-barium alloy. With this explanation, the applicants respectfully request that the objection to claim 15 be withdrawn.

Claims 1-4 and 10 and 25 stand rejected as being anticipated by Santella. The applicants vigorously traverse this rejection. The applicants submit that the rejected claims are not anticipated by Santella. Santella is directed to a welding wire which is designed to weld a specialty intermetallic alloy of nickel aluminide, nickel-iron-aluminide, iron aluminide or titanium aluminide. For this purpose, Santella's weld wire is made from two components, namely, a core and a sheath. However, in Santella the core is an elongated wire – not a metal powder composition as the core is in the present invention. In this regard, the Office will note that claim 1 specifically indicates that the core composition includes metal powders or metal alloy powders. Compare the disclosure at column 3, lines 25-35 of Santella. Additionally, with respect to the compositions defined in many of the applicants' dependent claims, the applicants note that the composition of the Santella wires is different than the composition of the claimed wires. The Santella wires contain relatively small amounts of aluminum, namely, 6-12% in the case of nickel aluminide wire, 6-12% in the case of nickel-iron-aluminide, 6-16% in the case of iron aluminide and 10-55% in the case of titanium aluminide.

For the foregoing reasons, the applicants respectfully request that the rejection over Santella be withdrawn.

Claims 1-5, 10 and 25 stand rejected as being anticipated by, Kamimura et al. The Kamimura et al. patent is directed to a wire that is used to provide a weld cladding. This wire is characterized in that the core contains particles of a heat resisting element with a smaller covering of metallic particles. The heat resisting element can be Co, Mo, Ni, or Cr, or a ceramic such as Al_2O_3 , Si_3N_4 , SiC, and CuO. This wire is designed for a distinctly different purpose than the claimed wire. Indeed, whereas the Kamimura et al. wire is used for providing a cladding, the claimed wire is used for producing aluminum weld deposits. Additionally, the wire of the present invention is specifically defined as being a metal-core wire that cannot contain more than 5% non-metallics. See the disclosure at page 2, line 13 and the amendment of Claim 1. In

accordance with the present invention, the presence of elements such as oxygen, nitrogen, carbon and oxygen is limited to less than 5%. There is no teaching in this regard in the reference.

The applicants submit that the teachings in, Kamimura et al. are also insufficient to lead a person skilled in the art to the claimed invention. The patent relates to modifying not only metals but also such diverse materials as resins by cladding them using weld wires. In one embodiment, the cladding material is applied to cast iron. In another embodiment the cladding is applied to cast aluminum. In yet another embodiment the cladding is applied to a polymer or resin. The applicant submits that the reference is defective as prior art because it does not disclose the composition of the wires. The disclosure at column 9, line 30 relative to aluminum alloy castings indicates only that particles of Co, Mo, Ni or Cr having a covering of aluminum particles are used in an aluminum sheath. There is no indication of the percentages used or of the ultimate alloy composition. As such, the applicants submit that the teachings in Kamimura et al. are insufficient under §112 to anticipate the present invention.

Claims 1-4, 10 and 25 are also rejected as being anticipated by Andersen. The applicants vigorously traverse this rejection. The Andersen patent does not relate to a metal core wire having a core composition containing metal or metal alloy powders. To the contrary, Andersen is directed to a stick electrode which includes a base rod and a hard coating. The patent clearly does not teach or suggest the claimed wire. In this regard the applicants again emphasize that claim 1 specifically calls for a wire having a core composition of metal or alloy powders.

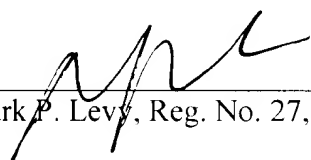
Claims 1-5, 10 and 25 are also rejected as being anticipated by Kenji et al. The Kenji et al. patent is discussed at page 2, beginning at line 6 of the application. As indicated there, Kenji is directed to a flux core wire. Unlike the metal core wire of this invention, flux core wires are designed to produce a flux as the electrode melts. In order to more clearly distinguish the claimed invention over Kenji, the applicants have amended claim 1 to define the wire as containing not more than 5% non-metallics. This precludes the claims from reading on flux core wires.

Claims 8 and 9 are rejected under 35 U.S.C. §103 as being obvious in view of the references discussed above in view of Dolomont. Dolomont is cited strictly with respect to the definition of the aluminum alloy that is defined in claims 8 and 9. Dolomont, like Andersen is directed to a stick electrode. Accordingly, Dolomont does not remedy the basic defects that have been identified in the teachings of the primary references. For the reasons discussed above, these claims do not teach or suggest the aluminum metal-core weld wire having the claimed core

composition of metal or metal alloy powders. Furthermore, the alloy compositions defined in these claims would not be used in conjunction with the Kamimura et al patent in view of the different applications involved, namely, a cladding application in the case of Kamimura et al versus the aluminum stick electrode of Dolomont. For this reason it is respectfully requested that the rejection be withdrawn.

The applicants gratefully acknowledge the Examiner's indication that claims 6-7, 11-14 and 16-17 would be allowable. The applicants have added new claim 27 which corresponds to the combination of claims 12 and 16 with the addition of the amounts of the metals recited in the second full paragraph on page 5 of the application. The applicants submit that in view of the foregoing remarks, claim 27 and the claims as amended should be allowed.

Respectfully submitted,



Mark P. Levy, Reg. No. 27,922

THOMPSON HINE LLP
2000 Courthouse Plaza NE
10 West Second Street
Dayton, Ohio 45402-1758
(937) 443-6949